

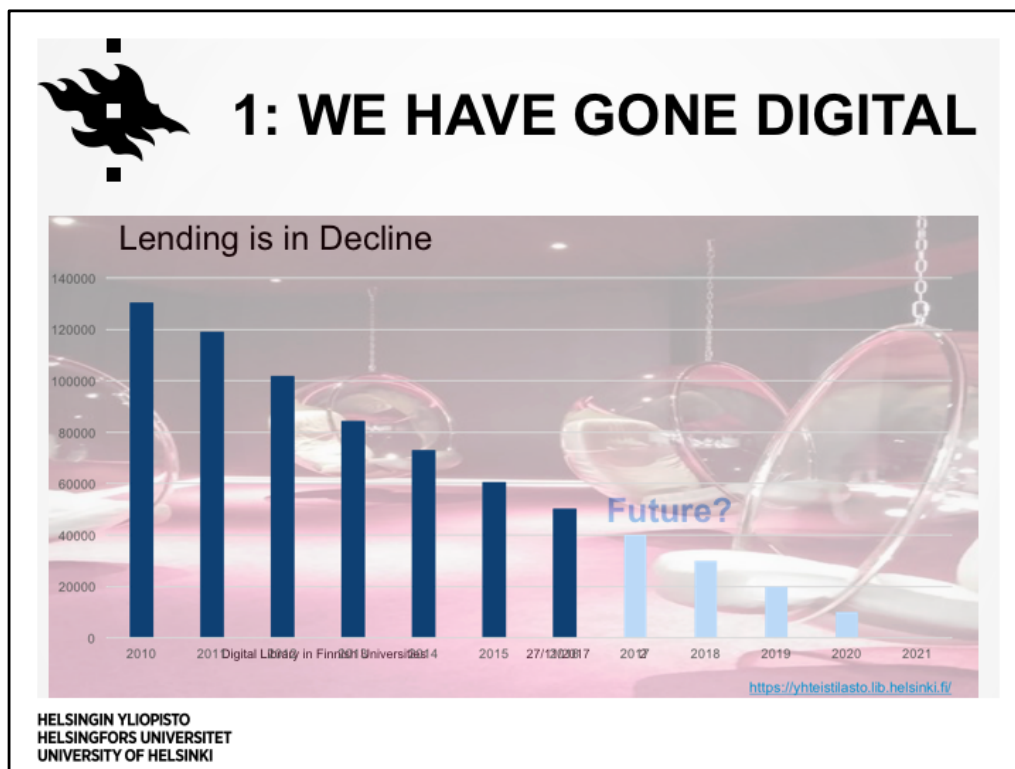


DIGITAL LIBRARY IN FINNISH UNIVERSITIES

“The Know How of Finnish Education”, Cairo, 4.12.2017

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Photo: Cupola of the Main Hall of the National Library



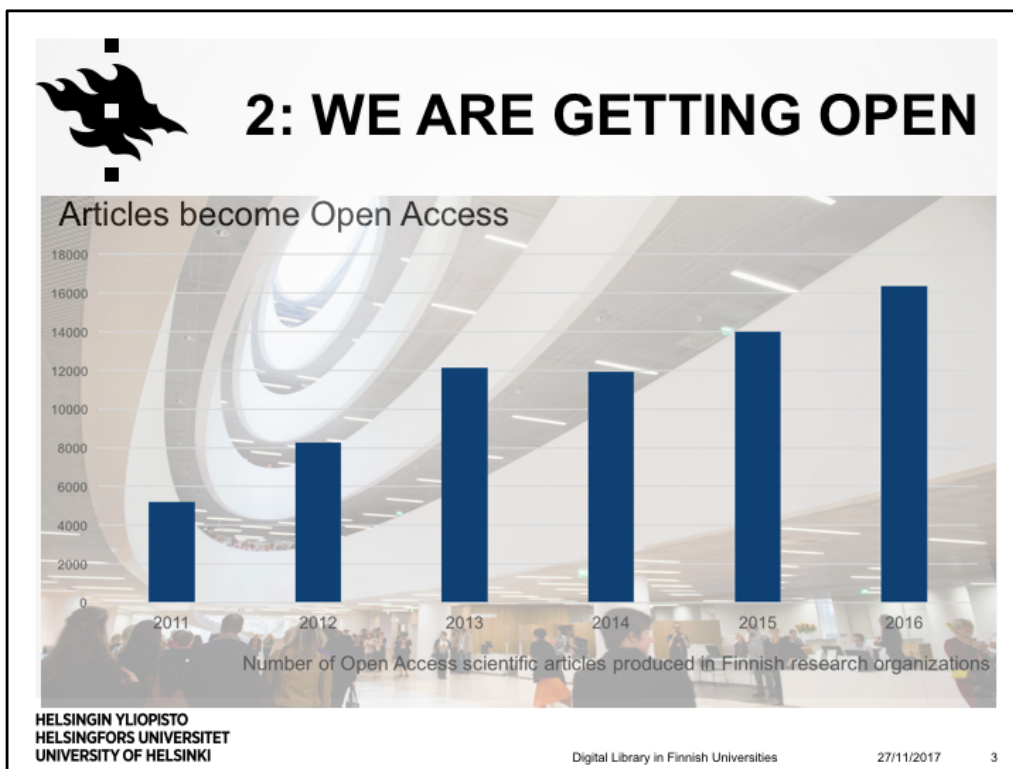
Academic libraries are digital libraries.

The importance of printed collections is in steady decline as the illustration* shows. We know that for many students, and researchers, too, materials does not exist if they are not online.

To keep the legacy collections relevant, the libraries would like to move toward more digitization and digital delivery of legacy collections. Unfortunately, the copyright law makes it often impossible, or very costly. That is why we are continuously lobbying for better conditions for digital re-use of our collections for research purposes, as well as for extensive rights for text and data mining.

Chart: Lending of books in Aalto University Library, and projection to next Research Libraries Statistics Database, <https://yhteistilasto.lib.helsinki.fi/>

Background image: Harald Herlin Learning Centre, Aalto University
<https://learningcentre.aalto.fi/en/harald-herlin-learning-centre/>



Open Access research outputs are available without fees and other restrictions on access, and that they may be re-used and re-distributed on very liberal terms.

Finnish libraries believe that Open Access is the right model for scientific publishing.


Gold Open Access means open business model of scientific publishing: the publications are free to use, and the costs are covered by for example fees paid by the authors. Gold Open Access has been established as a viable way of doing business. We encourage researchers to consider the aspects of openness when submitting their papers. We have also had collaboration with the Finnish scientific journals in creating a Gold Open Access model that would suit the local conditions.

Open Access has bearing outside the scientific community. It is important that the impact of science is felt everywhere in the society – in business, government, secondary education, and mass media. The Government, too, lays great weight on this impact that is called the "third task" of the universities, beside research and tuition.


Open Access changes the business model of publishers, but it changes the business model of libraries, too. Libraries must reconsider their role: what exactly is their task when it is not buying printed collections, or buying licenses.

Source of the chart data: The Finnish research publications output portal, <http://www.juuli.fi>

Background image: Helsinki University Library Main Building,
<http://www.helsinki.fi/kirjasto/en/library-locations/main-library/>



3: WE SHALL MASTER THE DATA



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Digital data makes possible new kind of data management, and data linking. Publications, underlying datasets, and methods form a web of information. We want to build services that help researchers at all stages of research data.

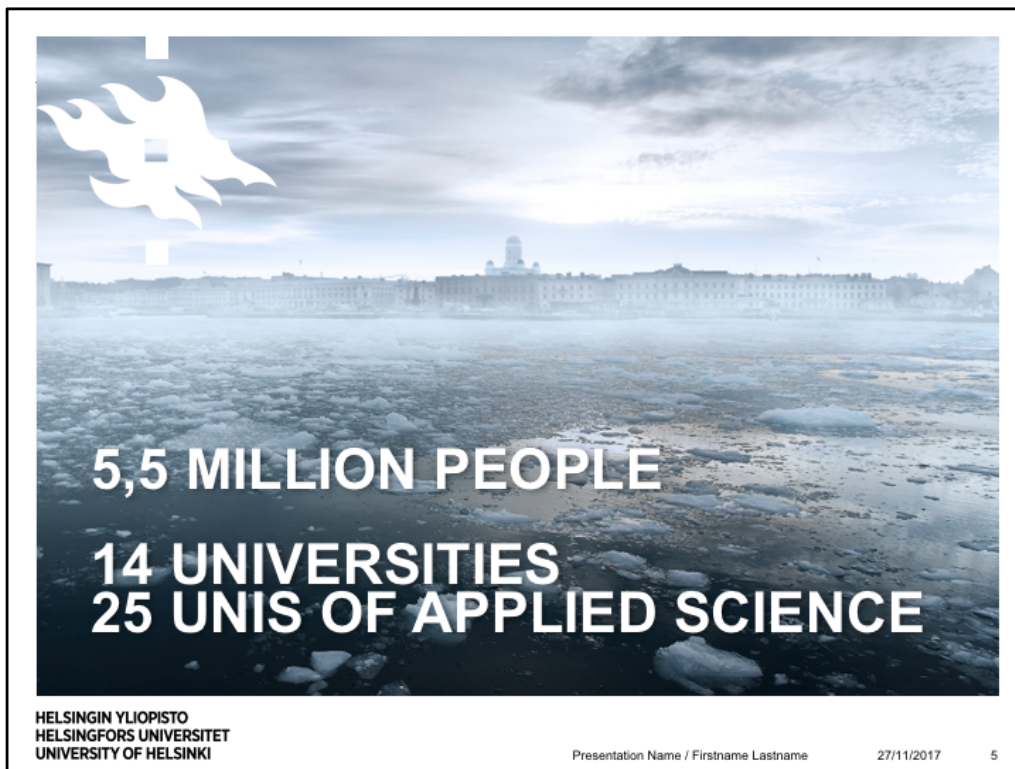
And researchers do need those services. Data publishing is still an area without many settled conventions and best practices. There are many questions regarding data ownership, data licensing, data integrity and security, distribution of sensitive data, and data curation in the long run that need to be answered.

There will not be one right answer. There are disciplines that have international infrastructures that support data management, and, in case of Finland, the European Science Cloud is an important initiative.

Whatever the environment, libraries must be involved. Librarians do not always understand and appreciate how their skills and knowledge can be put in new use. Libraries should understand that they can make important contributions that benefit researchers, research organizations – and libraries themselves.

I remind that we are moving from mere Open Access to Open Data – and beyond, towards Open Science. Open science comprises also openness of research process, openness of peer-review process, etc., although they are not in the scope of this presentation.

Image: Framework for Open Science and Research (2016).
<https://openscience.fi/framework-for-open-science>



University of Helsinki was founded in 1640. It remained the only university until 1908. Most were founded in the 1960s.

The system of universities of applied sciences was created in 1990s and was based on existing polytechnical schools.

The university libraries, therefore, never were such formidable “temples of knowledge” as many of their counterparts, e.g. in Central Europe.



1. WORKING TOGETHER
2. GOING BEYOND BOOKS
3. BEING BOLD

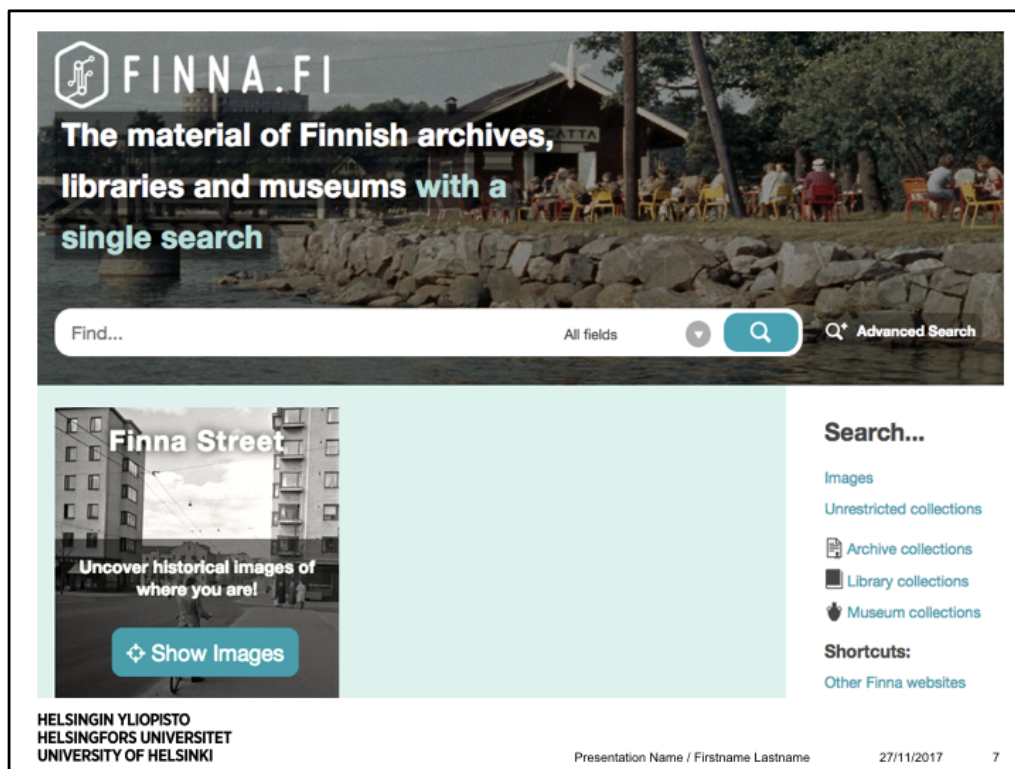
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In 2012, the total spending in Finnish scientific libraries was 167 million €, and in 2017 it will be about 150 million €, level of 2008.

We need to invest on the digital but cannot immediately abandon the printed world. Also we need to build the Open Access ecosystem, at the same time paying the ever-increasing subscription fees of large publishing houses. The transition cannot last forever.

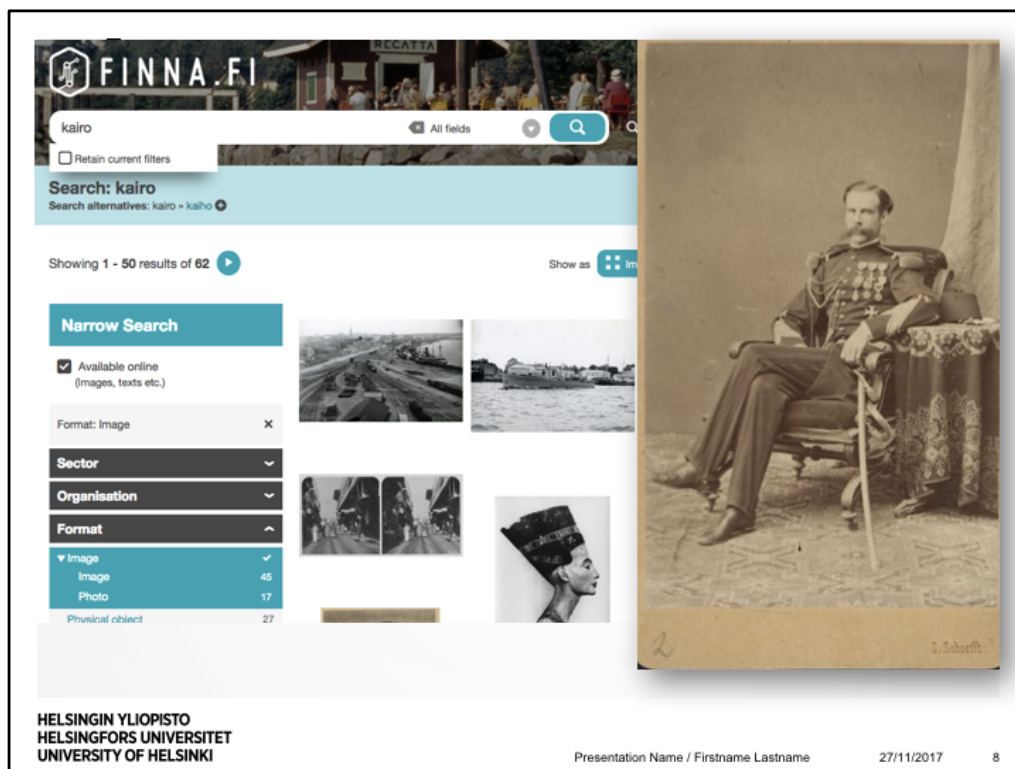
Illustration: Georg August Wallin (a.k.a. Abd Wali, 1811–1862), Finnish orientalist who travelled, disguised as a Muslim, in Egypt, Arabia, and Near East in 1843–1849.



FINNA provides free access to material from Finnish libraries, archives, and museums. Its creation took several years but the reception has been so positive that the effort certainly does seem worth it. It is based on open source software entirely. It is not only a search tool but customers may also renew their loans, pay their overdue fines, and so on, through Finna.

One of the important aspects of Finna is the emphasis that was put to usability. There are several usability specialists working on it. Also marketing was done on a level unusual for libraries. Libraries have a lot of systems that are heavily built on professional ideas about information management and searching. That must change.

One of the benefits has been increased cooperation between libraries, archives, museums, and galleries (the “GLAM” organizations). There are differences but the more we have worked together, the more we have found new ways to work together.



There is not one Finna but over 60. Organization can customize the view to better meet the needs of their customers, and also choose what data sources are shown in the results. Of course, the needs of a public library are very different from those of a university library, or an archive.

Do not let the results of the image search confuse: researchers and their needs are very important in Finna. The licensed scientific e-journals and books are of course available through it. It also provides easy linking to reference management tools, etc.

Illustration: The man in picture is Waldemar Becker (a.k.a. Becker-bey, 1840-1907), a officer who served in the Egyptian military in the 1870s.



COOPERATION ON E-RESOURCES

- FinELib Consortium negotiates e-resource license agreements for the Finnish scholarly community
 - www.finelib.fi
 - Started 1998
 - Budget 29 million €, funded mostly by organization
- Benefits of size
- Better negotiation skills
- Strategic approach
- **FinELib strives for Open Access**



FINELIB & OPEN ACCESS: GRASSROOT SUPPORT

Our prices as Open Data:
<https://openscience.fi/publishercosts>

STATEMENT
 Unless a fair deal is presented by Elsevier, the Finnish library consortium (FinELib) will not renew its subscriptions to Elsevier journals in:

3 6 1 0 2 8 5 3
 Days Hours Minutes Seconds

<http://www.nodealnoreview.org/>

THE COST OF SCIENTIFIC PUBLICATIONS MUST NOT GET OUT OF HAND

[UPDATE 2016-12-21] Elsevier and Finland's higher education and research institutes **have agreed** on one year's extension to negotiations on electronic journals. Similar extensions **have been agreed** on with Wiley and American Chemical Society. More time is needed in order to find a solution for advancing open access. Deals covering multiple years **have been made** with Taylor & Francis and Sage.

www.tiedonhinta.fi

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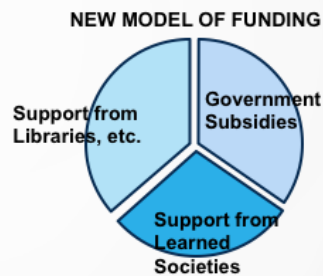
Lately, the negotiations of FinELib with large scientific publishers have not been easy. FinELib has a strategic goal to increase Open Access and insists of removing barriers of it in licensing contracts. It has been vital that the the rectors of the universities have been kept informed and well committed to the goals of FinELib.

Equally important has been the growing awareness about the realities of scientific publishing industry in the research community at large. For example, in www.nodealnoreview.org researchers can join to pledge to boycott editorial and reviewing tasks in Elsevier journals, should not the deal with the publishing house turn out to be satisfactory.



BUSINESS MODEL OF OPEN JOURNALS FOR FINLAND

- Mostly small publishers
- Only a few are important internationally, but
- Important to have science done in Finnish, too
- How to publish without subscription fees?



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Finnish scientific journals, on the other hand, are not big business. Even though many of them are of high quality, they are definitely not goldmines to their publishers that are usually learned societies. Moving toward Open Access has also been difficult to them as the journals could not possibly demand such article processing costs (ACP) from authors that would cover the costs.

The National Library and the Federation of the Finnish Learned Societies have created a proposal for a new way of funding Finnish journals that would make it possible for them to go Open Access. It is based on support from the Finnish organizations, such as universities, that benefit the most from the existence of the domestic scientific journals. This support would replace the ACPs as a funding source.

More information about the business model: www.kotilava.fi

JOURNAL.FI

Finnish Scholarly Journals Online

Search for articles...

Recent issues

Tieteesä tapahtuu
VOL. 35 NO. 4 (2017)

Studia Celtica Fennica
VOL. 13 (2016)

TAHITI
VOL. 7 NO. 2 (2017)

AFinLA Yearbook
NO. 75 (2017)

Puhe ja kieli
VOL. 37 NO. 3 (2017)

Proceedings of the FMSERA annual symposium
(2017)

Last week's most read

Aikaväli ja pitkäikäisyyden monenlaisen toimijuus
• 146 | JANUUS

War and Violence in the Ideology of the Qumran Community
• 155 | STUDIA ORIENTALIA ELECTRONICA

Journal.fi

Journal.fi is a new journal management and publishing service provided by the Federation of Finnish Learned Societies. The site features 40 Finnish scholarly journals, with more to come.

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Journal.fi is a platform for open access journals. It is based on Open Journals Software, an open source product. It also contains tools to manage the editing phase. Maintained by the Federation of the Finnish Learned Societies, it is great help to journals that lack technical staff.

INSTITUTIONAL REPOSITORIES – ALSO FOR GOVERNMENT

40 organizations, 1 infrastructure

VALTO
VALTIONEIKKOSTON JULKAISUKANALITIIKKA

Search

Valto frontpage

Institutional Repository for the Government

The Institutional Repository (Valto) includes the publication series of all Finnish ministries in pdf-format from the beginning of 2016 and some publications that date further back.

You can search publications by the title of the publication, by the author or by using keywords, etc. Valto is open to the public. You may refer to the publications providing you mention the source.

Publications classified by ministry

Ministry of Transport and Communications [1045]

Recent Submissions

Economic Contribution of Copyright-Based Industries in Finland 2013-2015
Publications of the Ministry of Education and Culture, Finland : 2017-47

BROWSE PUBLICATIONS

- By title
- By author
- By date of publication
- Most recently added
- By keywords

STORE DATA

- Log in
- Register

DISCOVER

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Institutional repositories (IR) are one of the infrastructures that enable Open Access. In IRs, researchers can submit their articles that have been published in scientific journal (most publishers grant them right to do so). For example, University of Jyväskylä has been able to get 50 % of articles published by its faculty in the repository.

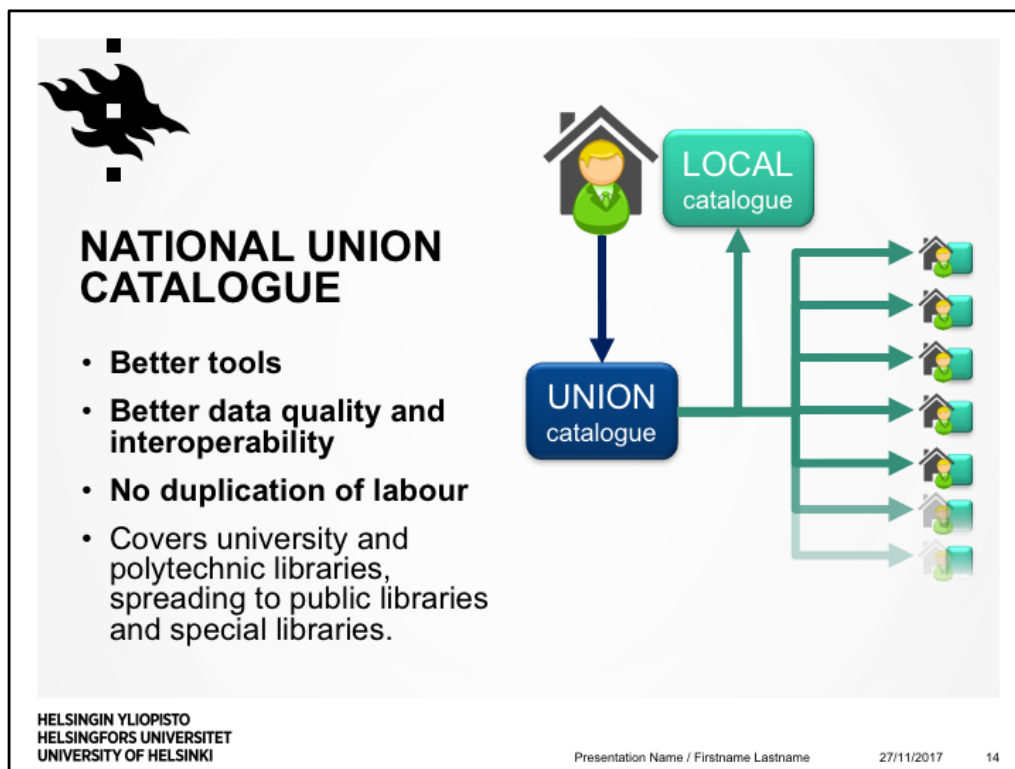
Why are IRs important?

- They make the articles available to all, where as in journals they most often are behind paywalls.
- They help the university to better evaluate its results.
- They help to make sure the articles will not disappear from the web – journals do disappear.
- IRs demonstrably increases the visibility of a researcher's output.

In addition to the IR infrastructure provided by the National Library, a number of organizations run their own repositories. The Finnish repositories are almost without exception using DSpace open source software.

The National Library provides following IRs:

www.doria.fi
www.theseus.fi
www.julkari.fi
jukuri.luke.fi
tampub.uta.fi
lauda.ulapland.fi



Participating libraries do the cataloguing work in one system, and the other libraries may copy the work done by the others. Every library then gets a copy of records in its own local system, where for example circulation is handled.

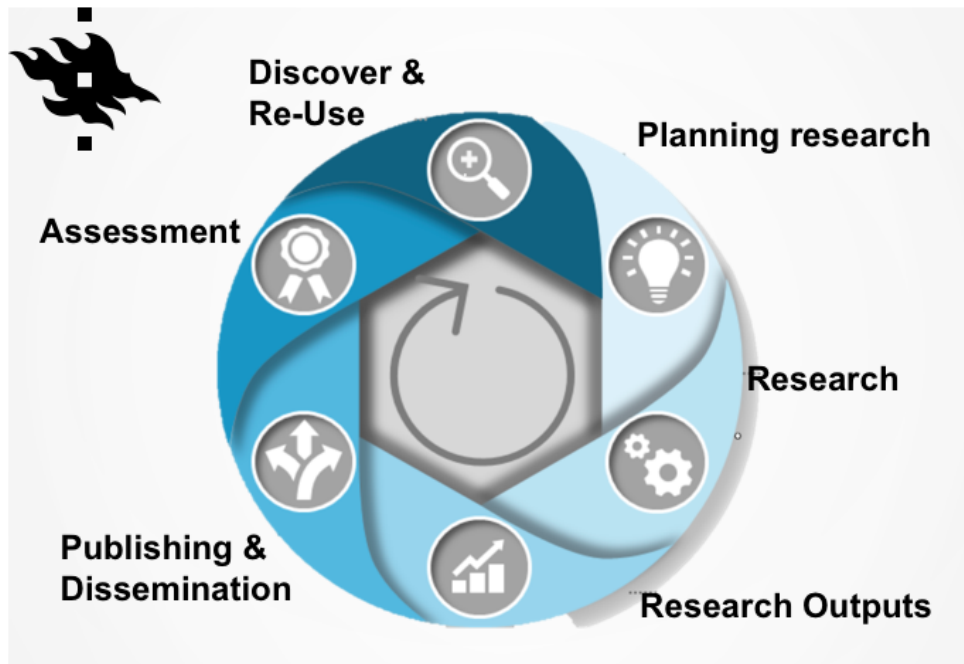
The flow of data is thus the opposite of that in the other union catalogue model, where data created in local system is collected together. The Finnish system saves labour and better ensures that uniform rules in data creation are followed.

National Union Catalogue info:

<https://www.kansalliskirjasto.fi/en/services/metadata-reserve-services/melinda>



- Shared service for **permanent** digital preservation was launched in 2015.
- Libraries, Archives, Museums
 - E.g. Electronic legal deposit in the National Library
 - Savings and quality through cooperation
 - A centre of excellence that none of the organizations could have created on its own.



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CASE UNIVERSITY OF JYVÄSKYLÄ: FROM A “LIBRARY” TO AN “OPEN SCIENCE CENTRE”

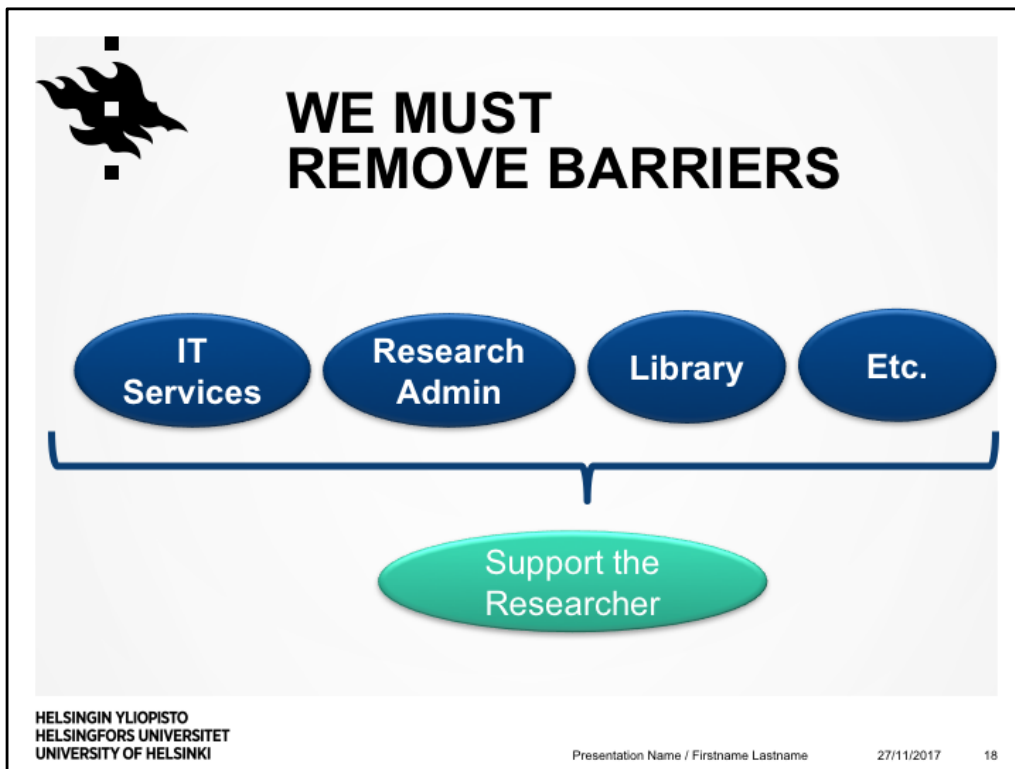
Flowing study and research - together



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University of Jyväskylä is one of those where a lot of effort has been put to bringing the library services on par with the needs of today's researchers. The name change symbolizes the mindset.



When data is more and more intertwined with other data, and when publications begin to link to datasets, it is crucial to break down the silos of expertise. Libraries must know something about data storage, for example, and IT centres must know something about research ethics.

In the University of Helsinki, the researchers have one point of contact where they can get help in all kinds of problems regarding research data, and publishing. Librarians, IT specialists, lawyers, research funding experts, and others join the forces behind the scenes to find the best possible solutions.



OPEN SCIENCE AND RESEARCH INITIATIVE 2014–2017

- “By 2017, Finland is to become one of the leading countries in openness of science.”
- “Possibilities of open science will be widely utilised.”
- New services for researchers and research organizations
- Evaluations of openness
- Support to local initiatives

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In Finland, the Ministry of Education and Culture promotes research information availability and open science through the Open Science and Research Initiative, which is set out for the years 2014-2017. The objective is for Finland to become one of the leading countries in openness of science and research by the year 2017 and to ensure that the possibilities of open science will be widely utilised in our society.

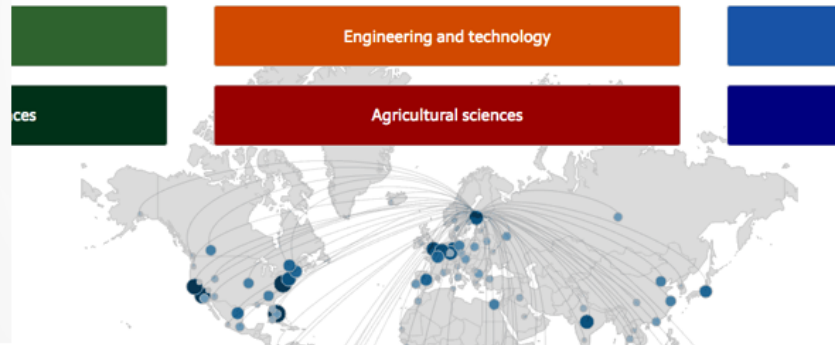
The ATT Initiative has had a string impact in interest in open science among its target groups. It has also had an impact on organizational policies. The operational impact will be seen in 2018 when a new set of service components will be launched.

This initiative will be followed by the Research Information Hub Initiative. The planned service will be a warehouse for metadata on, for example, publications, research data, research infrastructures, researchers, projects/projects and research groups. The Dutch narcis.nl is one of the models. Another initiative about to begin is the Data Management and supercomputing Programme that will invest 33 million € in research data infrastructures, and increase research on artificial intelligence.



LOCAL INITIATIVES

Top 5% of Finnish research, as measured by altmetrics



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<https://fimpact.utu.fi/> is one example of outputs that the Open Science and Research Initiative has funded.




TOOLS FOR RESEARCHERS

- Data management planning tool www.dmptuuli.fi
- Research dataset metadata creation tool (2018)
- Research data storage services openscience.fi/ida
- National research data catalogue etsin.avointiede.fi/
- Long-term preservation of research data (2018)
- Open Data Interfaces avaa.tdata.fi

The main theme of the data management services developed in the Open Science and Research Initiative is the availability of research data – especially, the long term availability. It is trivial to publish a data file, but to really produce quality datasets that will stay available over time requires planning and discipline. The services aim to support research in all stages of data life cycle.

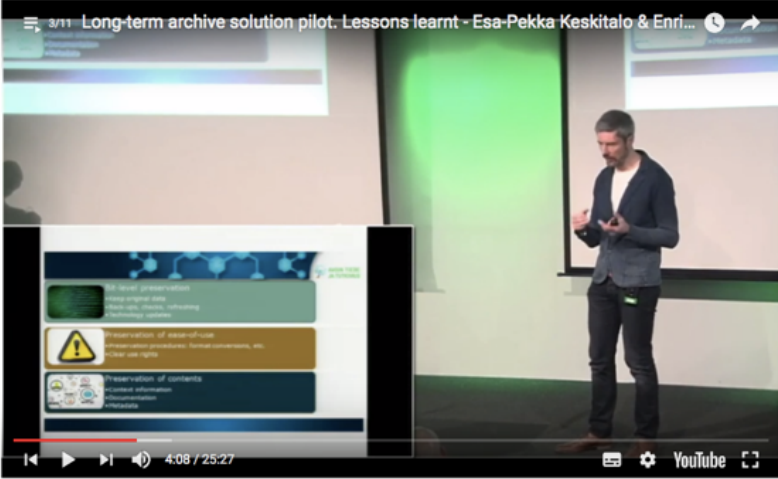
The services form a whole, so that data moves from one component to another as fluently as possible. We will also provide a single sign-on to all components.

The researchers and research organizations are free to use them but not obliged to do so.



OPEN SCIENCE EDUCATION

3/11 Long-term archive solution pilot. Lessons learnt - Esa-Pekka Keskitalo & Enri...



4:08 / 25:27

YouTube

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Training is an important aspect of moving toward Open Science. In 2015–2017 the focus has been in spreading the word about the new concepts and practices. In the future, we will move toward education of doctoral students and undergraduates. The training programme has been coordinated by the National Library.

<https://openscience.fi/training>



CSC – IT CENTRE FOR SCIENCE

CSC has turned from supercomputing to a multi-faceted support service that is highly esteemed among the researchers.



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CSC – the Centre of Scientific Computing is a company owned by the Ministry of Education and the universities. It provides a cast range of services to universities, public administration, and others. For example, it hosts almost all the servers that the National Library needs in order to run its services. Researcher, too, obtain from CSC a lot of services related to data storage, computing, data analysis and visualization, etc.

CSC is one of the key players as far as Open Science is concerned.



The new public library is being constructed in the very centre of Helsinki, facing the Parliament. According to a recent survey, the public library network is, the most esteemed public service in Finland.

There are no good libraries without good customers. Public libraries have a vital role in creating an atmosphere that respects knowledge, critical thinking, and scientific inquisitiveness.



THANK YOU

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Please do not hesitate to be in contact with the presenter:

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Illustration: Finnish workmen erecting a power line pole in Egypt in 1960s.